U.S. Patent Application Serial Number 10/795,992 Attorney Docket Number 027019-00001

## **IN THE SPECIFICATION:**

Please amend the Specification as follows:

Please amend the paragraph on page 6, lines 21-22 of the Specification as follows:

FIG. 3 is a view FIGs. 3A and 3B are views for explaining a problem when the fixation unit shown in FIG. 2 has the conventional fit tolerance between a thermal fixation roller and a drive roller.

Please amend the paragraph on page 6, lines 23-25 of the Specification as follows:

FIG. 4 is a view FIGs. 4A and 4B are views for explaining an operation when the fixation unit shown in FIG. 2 has the inventive fit tolerance between the thermal fixation roller and the drive roller.

Please insert the following paragraph on page 7, line 3 of the Specification:

FIG. 6 is a view showing another embodiment of the fixation unit shown in FIG. 4A.

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Please amend the paragraph on page 9, lines 16-23 of the Specification as follows:

The thermal fixation roller 210 and the rubber roller 230 are disposed parallel to and in contact with each other, and a nip N is formed therebetween. The thermal fixation roller 210 is made, for example, of aluminum or iron which has a good thermal conductivity, and has a hollow cylindrical shape. As discussed later with reference to FIGs. 3A, 3B, 4A and 4B 3 and 4, the thermal fixation roller 210 has a notch 214 at its end 212. The notch 214 has, as shown in FIG. 4B, a shape similar to a shape similar to a semi-track that has been known to generally mitigate a stress concentration. A surface of the thermal fixation roller 210 is coated and prevents toner from adhering to it.

Please amend the paragraph on page 10, lines 23-25 as follows:

The above load applies a torque to the thermal fixation roller 210 as discussed later with reference to FIGs. <u>3A, 3B, 4A and 4B</u> <del>3 and 4</del>, especially to the notch 214 in the thermal fixation roller 210.

Please amend the paragraph on page 11, lines 5-11 of the Specification as follows:

The instant embodiment makes the drive gear 240 of a material having a smaller thermal expansion coefficient than that of the thermal fixation roller 210, such as brass. As described below, the drive gear 240 preferably has a thermal expansion coefficient different from that of the thermal fixation roller 210. As shown in FIGs. <u>3A, 3B, 4A and</u>

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<u>4B</u> 3 and 4, the drive gear 240 has a projection 242. The drive gear 240 is mounted on the thermal fixation roller 210 so that the projection 242 is inserted into the notch 214 in the thermal fixation roller 210.

Please amend the paragraph spanning page 11, line 18 to page 12, line 2 of the Specification as follows:

A description will be given of a method for manufacturing the fixation unit 200 with reference to FIGs. 3 3A to 5. Here, FIGs. 3A, 3B, 4A and 4B 3 and 4 are views for explaining the fit tolerance between the thermal fixation roller 210 and the drive gear 240 and its effects. More specifically, FIG. 3A shows a perspective view when the thermal fixation roller 210's outer diameter A and the drive gear 240's inner diameter B do not satisfy the condition of the instant embodiment, and FIG. 3B is a typical view showing the stress applied to the thermal fixation roller 210. On the other hand, FIG. 4A shows a perspective view when the thermal fixation roller 210's outer diameter A and the drive gear 240's inner diameter B satisfy the condition of the instant embodiment, and FIG. 4B is a typical view showing the stress applied to the thermal fixation roller 210. FIG. 5 is a flowchart for explaining a method for manufacturing the fixation unit 200.

Please amend the paragraph on page 14, lines 1-9 of the Specification as follows:

The instant invention provides the thermal fixation roller 210 with the notch 214, and the drive gear 240 with the projection 242. However, the thermal fixation roller 210

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may have the projection 218 whereas the drive gear 240 has the may have a notch, as shown in FIG. 6. Here, FIG. 6 shows another embodiment of the fixation unit shown in FIG. 4A. A reverse arrangement of the projection 242 and the notch 214 to the conventional one would change a stress distribution and reduce an amount of the stress concentration. The present invention does not limit a shape of the projection. A concave / convex engagement part does not have to exist between the thermal fixation roller 210 and the drive gear 240. As shown in FIG. 4A, the formed friction-force generation range 216 can drive the thermal fixation roller 210 using a static friction between them.